

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**APPEAL FROM THE EXAMINER TO THE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: James R. Albritton
Serial No.: 09/074,496
Filing Date: May 7, 1998
Group Art Unit: 3679
Examiner: John R. Cottingham
Title: BREAKAWAY SUPPORT POST FOR HIGHWAY
GUARDRAIL END TREATMENTS

MAIL STOP: REPLY BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

REPLY BRIEF

Appellant respectfully submits this Reply Brief under 37 C.F.R. § 41.41, in response to the Examiner's Answer mailed March 14, 2006. Appellant filed an Appeal Brief on July 12, 2004, explaining clearly and in detail why the final rejection of Claims 37 and 40 is improper and should be reversed by the Board of Patent Appeals and Interferences (the "Board"). In the Examiner's Answer to the Appeal Brief filed on July 12, 2004, the initial rejections are sustained. As explained in more detail below, the Examiner's final rejection of these claims cannot be properly maintained.

Status of Claims

Claims 37 and 40 are pending in this application and stand rejected pursuant to a final Office Action mailed December 19, 2003. Claims 5-12, 24-27, 32-33 and 39 were previously canceled. Claims 37 and 40 are presented for appeal.

Grounds of Rejection to be Reviewed on Appeal

Appellant requests that the Board review the Examiner's rejection of Claims 37 and 40 under the first paragraph of 35 U.S.C. § 112 as failing to comply with the written description requirement.

Argument

1. The Specification Describes an Attachment Within the Meaning of Claim 37 and a Second Fasteners Within the Meaning of Claim 40.

In the Examiner's Answer, the Examiner agrees that the specification and drawings show a first fastener comprising first and second connectors. Examiner's Answer, page 4. However, the Examiner contends that:

[T]he specification does not disclose how post 144 is attached to bracket 140 to meet the limitation as the second fastener/attachment. It is assumed that it might be a weld, but there is nothing to support that assumption in the specification. In order to read claims 37 and 40 on the disclosed invention, the connection between post 144 and bracket 140 must be viewed as the second fastener/attachment. There is nothing in either the specification nor the drawings that discloses how these two parts are connected or if they are a single part.

Examiner's Answer, page 4.

In making these conclusory assertions, the Examiner fails to address any of the arguments made on this issue in Appellant's Appeal Brief. Specifically, as illustrated on page 9 of the Appeal Brief, Figures 4-6 of Appellant's specification discloses a second fastener (Claim 40) or attachment (Claim 37) connecting a second end of the joint member to a lower post member. Connecting joint member (bracket 152) is connected to a lower post member (lower portion 144) by a second fastener or attachment ("bracket 152 attached to the end of lower portion 144"). *See Specification, page 20, line 3 - page 21, line 14.* The American Heritage College Dictionary (3rd ed. 2000) provides one definition of "attachment" as "[s]omething . . . that attaches one thing to another." The definition of "fastener" was discussed above. Appellant's specification refers to the connection between bracket 152 and lower portion 144 as an "attachment." *See, e.g., Specification, page 20, lines 28-31.* Moreover, it describes bracket 152 as "attached" to the end of lower portion 144. *Specification, page 20, lines 7-8.* Thus, Appellant discloses an attachment or second fastener connecting bracket 152 and lower portion 144.

One of ordinary skill in the art would understand that various types of attachment could be used. While the specification does not limit the invention to any particular type of attachment, the Examiner apparently interprets Appellant's disclosed attachment as a weld. *See, e.g., Final Office Action, page 3, paragraph 2.* U.S. Patent No. 5,988,598 (the "'598

Patent") with which Appellant's have requested an interference also indicates that a fastener may include a weld. *See* '598 Patent, col. 2, lines 37-39, col. 4, lines 25-29, Claim 5. Although Appellant disputes that the '598 Patent is prior art, it is a reference before the PTO that may be used for claim interpretation. *See Arthur A. Collins, Inc. v. Northern Telecom Ltd.*, 216 F.3d 1042, 1045 (Fed. Cir. 2000). The view that "fasteners" include welds expressed in the '598 Patent is consistent with an ordinary meaning that a fastener is something that firmly attaches two things together. Appellant agrees that one of ordinary skill would understand that a weld is one form of fastener that could be used to attach bracket 152 to lower portion 144. Moreover, given the described operation of the invention (Specification, page 21, line 34 - page 22, line 3), some form of attachment must be present or the invention would not work in the manner described. If a vehicle smashing into the guardrail causes shear pin 156 to break and the upper post member to pivot, then the joint member 152 must be attached to lower post member 144. If there were no fastener, then joint member 152 and lower post member 144 would separate. One of ordinary skill in the art could only reasonably conclude that a fastener or attachment attaches bracket 152 to lower portion 144.

2. The Specification Discloses the Different Failure Strengths Required by Claims 37 and 40.

In the Examiner's Answer, the Examiner also states that:

[T]here is nothing in the specification or drawings to support how the first fastener, comprised of connectors 154 and 156, has failure strength less than that of the fastener/attachment between bracket 140 and post 144. Applicant argues because part of the first fastener fails, as in figure 6, it meets the claimed limitations, but the claims state "said first fastener [154 and 156] having a failure strength less than a second failure strength of said attachment[/fastener]" which implies the entire first fastener (154 and 156) must fail before the second fastener (144 and 140). The first fastener has to have first and second connectors, as set out in the claims, and the Applicant implies that the first fastener can be either 154 or 156, but this cannot be since the first and second connectors are 154 and 156 which comprises the first fastener. In figure 6, it shows both connector 154 and the connection between the post 144 and bracket 140 still intact after an impact from a vehicle, and there is nothing in the specification to describe the different failure strengths between them.

Examiner's Answer, pages 4-5.

First, in response to the Examiner's contention that the claim limitation implies that the entire first fastener (e.g., pivot pin 154 and 156 or pivot pin 154, shear pin 156 and bracket 150) must fail before the second fastener, Appellant submits that the failure of even one component of the first fastener (e.g., shear pin 156) supports the disclosure of the failure of the first fastener. In addition, Appellant notes that in the '598 Patent with which Appellant has requested an interference, the claimed first and second fasteners are disclosed as at least two through bolts 20A and 20B to hold an upper post member 12 to plates 25. *See* '598 Patent, col. 2, lines 38-40, col. 3, lines 9-18. The fasteners may also be pins or other connectors including welds. *See* '598 Patent, col. 2, lines 38-40. In operation, when a side impact occurs, one of the two fasteners (which as noted could be bolts, pins or welds) breaks. *See* '598 Patent, col. 2, lines 41-44, col. 3, lines 9-18. Thus, the fastener made up of the two bolts in the embodiment described in the '598 Patent fails when one of the two bolts breaks. Similarly, in the present application before the Patent Office, the fastener made up of the two pins fails when one of the two pins breaks.

As indicated on pages 5-10 of the Appeal Brief, Appellant discloses a first fastener (the combination of pivot pin 154, shear pin 156 and bracket 150 under the first interpretation or the combination of pivot pin 154 and shear pin 156 under the second interpretation) and a second fastener or attachment (bracket 152 attached to the end of lower portion 144). Figure 6 illustrates the operation of breakaway support post 130 in response to an impact by a vehicle with one end of guardrail 22. *See* Specification, page 9, lines 24-30. As evident in Figure 6, shear pin 156 fails while bracket 152 remains attached to lower portion 144 after a vehicle smashes into the support post. Thus, Appellant's first fastener must have a failure strength less than a failure strength of Appellant's second fastener or attachment. If it did not, then the pin would not break while the second fastener (or attachment) continued to attach bracket 152 to lower portion 144. Appellant notes that while Appellant's drawings and related description in combination demonstrate this element, it should be noted that even drawings alone may be sufficient to satisfy the written description requirement of the first paragraph of 35 U.S.C. §112. *See Vas-Cath v. Mahurkar*, 935 F.2d at 1564.

The Final Office Action states:

[T]here is nothing in the drawings that would indicate that the attachment, referring to the welds, is stronger than the fastener 156. Welds are made of different materials, and done [many] different ways, and can be done to be frangible under certain loads. It is not inherent that [the] attachment, as indicated by the figures, would have greater failure strength than that of the fastener.

Final Office Action, page 3, paragraph 2. It is true that one may design particular embodiments that include an attachment (which could be but is not limited to a weld) between a bracket and a lower portion of a support post that is frangible under different loads in the different embodiments. However, the embodiment whose function is illustrated in Figure 6 and described in the specification will not work as illustrated and described unless the failure strength of the attachment between bracket 152 and lower portion 144 is greater than the failure strength of shear pin 156. The specification explicitly teaches that a vehicle crash will "break shear pin 156" and, "[a]s a result, upper portion 142 will then rotate relative to lower portion 144 as shown in Figure 6." Such rotation would not occur unless the failure strength of the shear pin 156 was less than the second fastener or attachment.

Moreover, if the failure strength was not as recited in the claims, the invention may not function for at least one intended purpose. One such intended purpose allows for an upper portion of a post to deflect and then break off from a lower portion upon vehicle impact to "minimize lifting of the impacting vehicle into the air." Specification, page 8, lines 8-11. Appellant discloses such an embodiment with respect to Figures 4-6 that works for this intended purpose. Thus, to work for its intended purpose, it is inherent that the shear pin 156 has a failure strength less than a failure strength of the attachment between bracket 152 and lower portion 144. Otherwise, the post would not necessarily deflect.

CONCLUSION

Appellant has demonstrated that the present invention, as claimed, is patentable under the first paragraph of 35 U.S.C. §112. Therefore, Appellant respectfully requests the Board of Patent Appeals and Interferences to reverse the final rejection of the Examiner and instruction the Examiner to grant Appellant's pending request that an interference be declared between the present Application and U.S. Patent 5,988,598.

Although Appellant believes no fees are due, the Commissioner is hereby authorized to charge any additional fees and credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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